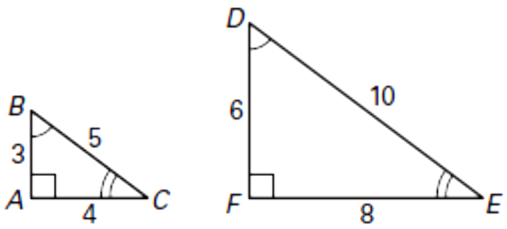
Name_____ **Period**_____

Geometry Unit 6 Worksheet #5 – Similar Polygons and Scale Factors

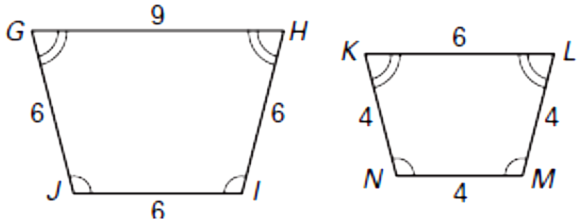
For #1 -6, complete the similarity statement for the pair of polygons. Then find the scale factor.

1)



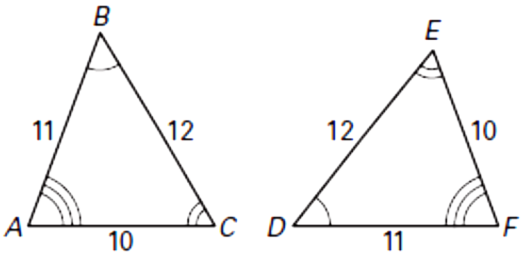
ΔABC ~_____, scale factor_____

2)



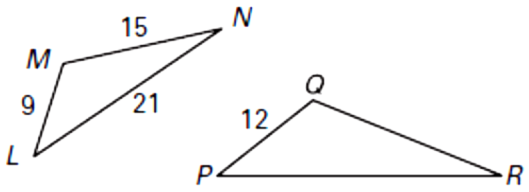
JGHI ~_____, scale factor_____

3)



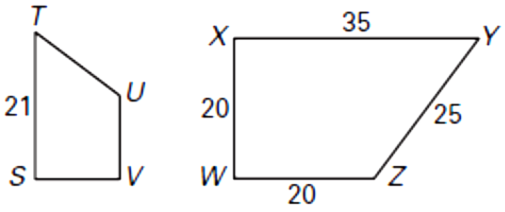
ΔABC ~_____, scale factor_____

4)



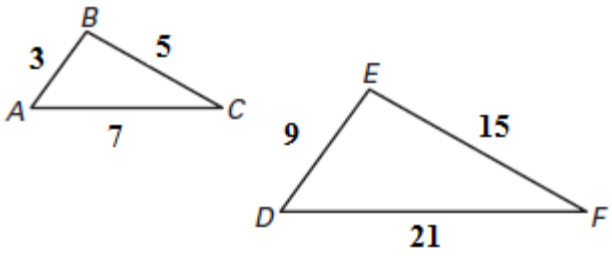
ΔLMN ~_____, scale factor_____

5)



TUVS ~_____, scale factor_____

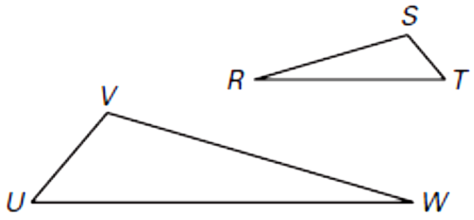
6)



ΔABC ~_____, scale factor_____

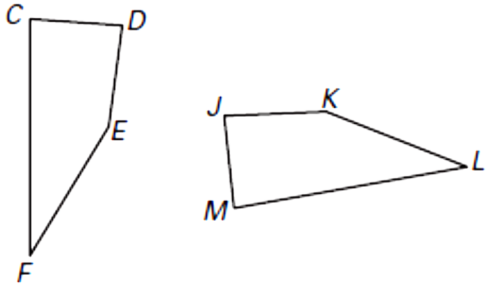
For #7 & 8, using the similarity statement list the angles that are congruent.

7) $\triangle RST \sim \triangle WVU$



$\angle R \cong$_____, $\angle S \cong$_____, $\angle T \cong$_____

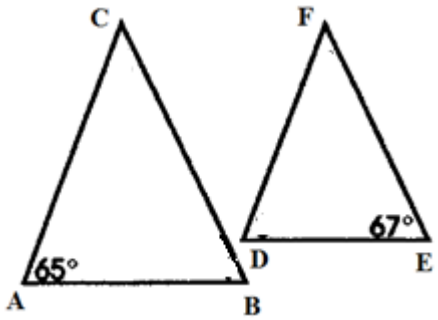
8) $CDEF \sim MJKL$



$\angle C \cong$_____, $\angle D \cong$_____, $\angle E \cong$_____, $\angle F \cong$_____

For #9 - 11, use the similarity statement to help you solve for the missing angles in the triangle.

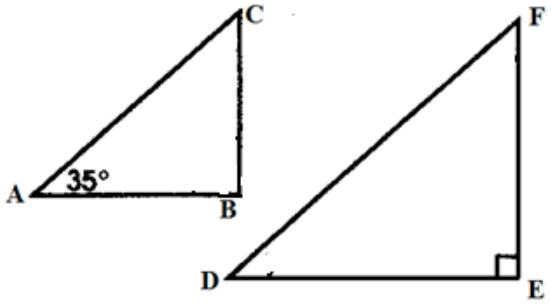
9) $\Delta ABC \sim \Delta DEF$



$\angle B =$ _____ $\angle C =$ _____

$\angle D =$ _____ $\angle F =$ _____

10) $\Delta ABC \sim \Delta DEF$

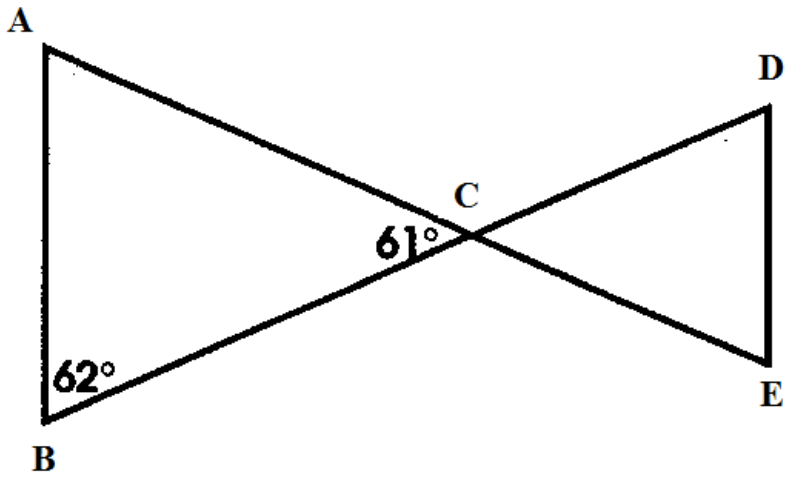


$\angle B =$ _____ $\angle C =$ _____

$\angle D =$ _____ $\angle F =$ _____

11) $\Delta ABC \sim \Delta EDC$

$\angle A =$ _____



$\angle DCE =$ _____

$\angle D =$ _____

$\angle E =$ _____